

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

<b>WSOU INVESTMENTS, LLC D/B/A</b>	§	
<b>BRAZOS LICENSING AND</b>	§	<b>CIVIL ACTION 6:20-CV-00474-ADA</b>
<b>DEVELOPMENT,</b>	§	<b>CIVIL ACTION 6:20-CV-00475-ADA</b>
<b>Plaintiff,</b>	§	<b>CIVIL ACTION 6:20-CV-00476-ADA</b>
	§	<b>CIVIL ACTION 6:20-CV-00479-ADA</b>
<b>v.</b>	§	<b>PATENT CASE</b>
<b>DELL TECHNOLOGIES INC.,</b>	§	
<b>DELL INC., EMC CORPORATION,</b>	§	<b>JURY TRIAL DEMANDED</b>
<b>AND VMWARE, INC.,</b>	§	
<b>Defendants.</b>	§	

**PLAINTIFF'S OPENING CLAIM CONSTRUCTION BRIEF**

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Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development (“WSOU”) respectfully submits this claim construction brief in support of its proposed constructions.

## I. Legal Standards

### A. Claim Construction Generally

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*), *cert. denied*, 546 U.S. 1170 (2006); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds by* 135 S. Ct. 1846, 1846 (2015) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”). The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Philips*, 415 F.3d at 1313. ““Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.”” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)). Although extrinsic evidence can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.”” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)).

This Court recently explained that “[t]he ‘only two exceptions to [the] general rule’ that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution.” *CloudofChange, LLC v. NCR Corp.*, No. 6-19-CV-00513-ADA, 2020 WL 4004810, at \*2 (W.D. Tex. July 15, 2020) (quoting *Thorner v. Sony Computer*

*Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). “To act as his/her own lexicographer, the patentee must ‘clearly set forth a definition of the disputed claim term,’ and ‘clearly express an intent to define the term.’” *Id.* (quoting *Thorner*, 669 F.3d at 1365). And “[t]o disavow the full scope of a claim term, the patentee’s statements in the specification or prosecution history must represent ‘a clear disavowal of claim scope.’” *Id.* (quoting *Thorner*, 669 F.3d at 1366). “Accordingly, when ‘an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.’” *Id.* (quoting *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013)).

## B. Indefiniteness

The Patent Act requires claims to particularly point out and distinctly claim the subject matter regarded as the inventions. 35 U.S.C. § 112, ¶ 2. To satisfy this requirement, the claim must be read in light of the intrinsic evidence to determine whether it informs one of skill in the art at the time of the invention “about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910-11 (2014). To establish that a claim is indefinite, a patent challenger must prove indefiniteness by clear and convincing evidence. *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

## II. U.S. Patent No. 7,212,536 (Case No. 6:20-cv-00474) Claim Terms

### A. Terms with Constructions Not Selected for Construction by Defendants

Term	Construction
means for determining a number of the service interfaces associated with active channels in the connection-based network	Function: determining a number of the service interfaces associated with active channels in the connection-based network  Structure: bridge, and equivalents thereof; <i>see e.g.</i> , 2:26-34, 4:46-5:18, 5:19-27, 6:44-48, 7:45-56, 7:57-8:20
means for establishing a mapping between	Function: establishing a mapping between

user priorities read by the means for reading priorities of data frames and the service interfaces associated with active channels in the connection-based network based at least in part on a number of the service interfaces associated with active channels in the connection-based network	user priorities read by the means for reading priorities of data frames and the service interfaces associated with active channels in the connection-based network based at least in part on a number of the service interfaces associated with active channels in the connection-based network
means for assigning frames to the service interfaces based upon the user priorities and the mapping	Function: assigning frames to the service interfaces based upon the user priorities and the mapping  Structure: bridge, and equivalents thereof; <i>see e.g.</i> , 5:28-6:14, 6:15-47, 6:49-7:34, 9:8-17, 8:37-45, Figs. 4, 5A-I, 6.  Function: assigning frames to the service interfaces based upon the user priorities and the mapping  Structure: bridge, and equivalents thereof; <i>see e.g.</i> , 6:15-25, 7:22-34, 7:57-8:21

## B. Terms with Disputed Constructions

### 1. “bridge” (Claims 1, 12)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“a network interface device that operates no higher than the data link layer”

This term should get its plain and ordinary meaning. Defendants’ proposed construction is vague and confusing. For example, the phrase “operates no higher than the data link layer” is without any context and does not appear anywhere in the specification. As a result, Defendants’ proposed construction is vague and unhelpful. The specification already provides that “[t]he invention relates to data communication networks which include bridges or similar data handling devices.” ’536 patent, 1:6-7. In illustrative embodiments, the specification also provides that “Bridge 16 receives packets from a connected LAN segment 12 at local interface 23 which is connected to a first bridge port 25. Bridge 16 may comprise additional bridge ports connected to additional local interfaces (not shown) which are associated with different LAN segments. Bridge 16 also passes data received from other sources (such as other LAN segments) to LAN segment

12 by way of bridge port 25.” *Id.*, 4:26-33. Defendants’ proposed construction is confusing and unnecessary and should be rejected.

**2. “channel in a connection-based network” (Claims 1, 12)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“one of the paths that has been established in a network for communications”

This term should get its plain and ordinary meaning. Defendants’ proposed construction is vague and confusing. For example, it is unclear if Defendant intends the phrase “one of the paths” to mean that there is required to be other “paths.” Moreover, the phrase “established in a network for communications” is also vague and confusing at least because it is further unclear if the other “paths” are required to be for something other than “communications.” The specification itself provides numerous illustrative examples of a channel in a connection-based network. *See e.g.* ’536 patent, Fig. 1 (“FIG. 1 is a schematic diagram of a network having a number of ethernet segments connected by channels in a connection-based network”. *Id.*, 3:5-7), Fig. 3 (“FIG. 3 illustrates a pair of segments of a VLAN interconnected by a plurality of channels through a connection-based network”. *Id.*, 3:10-12). Defendants’ proposed construction is confusing and unnecessary and should be rejected.

**3. “a forwarding system configured to read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface.” (Claim 1)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	This term is subject to 35 U.S.C. § 112, ¶ 6.  Function: read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a

	<p>service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface</p> <p>Structure: Indefinite</p>
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This term should be given its plain and ordinary meaning. Because this term does not contain the words “means for,” there is a rebuttable presumption that section 112, paragraph 6, does not apply to that limitation. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). That presumption can be overcome, but only “if the challenger demonstrates that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* at 1349. The question whether the term “forwarding system” invokes section 112, paragraph 6, depends on whether persons skilled in the art would understand the claim language to refer to structure, assessed in light of the presumption that flows from the drafter’s choice not to employ the word “means.” *Samsung Elecs. Am. v. Prisua Eng’g Corp.*, 948 F.3d 1342, 1354 (Fed. Cir. 2020). “To determine whether the claim limitation at issue connotes sufficiently definite structure to a person of ordinary skill in the art, [courts] look first to intrinsic evidence, and then, if necessary, to the extrinsic evidence.” *Tek Global v. Sealant Sys. Int’l, Inc.*, 920 F.3d 777, 785 (Fed. Cir. 2019); *see also Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014, 1019 (Fed. Cir. 2017) (“To determine whether a claim recites sufficient structure, “it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function.””).

Here, a person of skill in the art would understand the claim language to refer to structure, where the specification provides certain exemplary embodiments, for example, in an “illustrated

embodiment”:

**“Bridge 16 receives packets from a connected LAN segment 12 at local interface 23 which is connected to a first bridge port 25. Bridge 16 may comprise additional bridge ports connected to additional local interfaces (not shown) which are associated with different LAN segments. Bridge 16 also passes data received from other sources (such as other LAN segments) to LAN segment 12 by way of bridge port 25. **Bridge port 25 may implement a set of service queues which handle the forwarding of packets having different user priorities onto LAN segment 12.**”** ’536 patent, 4:26-35 (emphasis added).

The specification further provides:

**“Bridging system 27 maintains a mapping between user priorities and available channels 15 in cell relay network 14. In preferred embodiments, for each of bridge ports 26, a map is maintained. The map may comprise, for example, a lookup table accessible to the system which manages the port 26. The map associates each of the user priorities in whatever system of user priorities is being used with a channel 15 in connection-based network 14 which is accessible by way of one of the service interfaces 30 associated with the port 26. The map may map between user priorities and predetermined connection identifiers for the channels. For example, bridging system 27 may contain data which associates each of bridge ports 26 with a VPI and data which associates each of service interfaces 30 with a VCI, as described above. **Equivalently, the map may map between user priorities and service interfaces 30.**”** *Id.*, 5:40-55 (emphasis added).

Finally, the specification provides:

*“Certain implementations of the invention comprise computer processors which execute software instructions which cause the processors to perform a method of the invention. For example, **bridging system 27 may comprise a computer processor which executes software instructions** which cause the processor to associate specific ones of ports 30 with specific channels on cell relay network 14. The invention may also be provided in the form of a program product. **The program product may comprise any medium which carries a set of computer-readable signals comprising instructions which, when executed by a computer processor, cause the data processor to execute a method of the invention.** The program product may be in any of a wide variety of forms. The program product may comprise, for example, physical media such as magnetic data storage media including floppy*

diskettes, hard disk drives, optical data storage media including CD ROMs, DVDs, electronic data storage media including ROMs, flash RAM, or the like or transmission-type media such as digital or analog communication links.” *Id.*, 8:46-64 (emphasis added).

As seen above, the specification provides various exemplary embodiments showing that the forwarding system may be a bridge with a bridge port and a bridging system, or a computer processor or a computer-readable medium comprising instructions for a processor (such as those found in Figure 6, *see e.g.*, *Id.*, 6:15-25). Accordingly, this term is not subject to 35 U.S.C. § 112 ¶ 6, and Defendants’ proposal should be rejected.

**4. “means for reading priorities of data frames directed by the bridge to at least a first one of the bridge ports”**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
<p>Subject to 35 U.S.C. § 112, ¶ 6</p> <p>Function: reading priorities of data frames directed by the bridge to at least a first one of the bridge ports</p> <p>Structure: bridge, with bridging system and bridge port, and equivalents thereof</p> <p>Algorithm (if required): <i>see e.g.</i>, ----, and equivalents thereof.</p>	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: reading priorities of data frames directed by the bridge to at least a first one of the bridge ports</p> <p>Structure: Indefinite</p>

The parties agree this term is subject to 35 U.S.C. § 112, ¶ 6. The parties also agree as to the recited function. However, the parties disagree as to the corresponding structure. The **correct corresponding structure is “bridge with bridging system and bridge port, and equivalents thereof.”** This is shown by the specification in exemplary embodiments. For example:

“**Bridge 16 receives packets from a connected LAN segment 12 at local interface 23 which is connected to a first bridge port 25.** Bridge 16 may comprise additional bridge ports connected to additional local interfaces (not shown) which are associated with different LAN segments. Bridge 16 also passes data received from other sources (such as other LAN segments) to LAN segment 12 by way of bridge port 25. **Bridge port 25 may implement a set of service**

**queues which handle the forwarding of packets having different user priorities onto LAN segment 12.** The service queues may be implemented, for example, according to the IEEE 802.1D and 802.1Q specifications.” ’536 patent, 4:26-37 (emphasis added).

As another example, the specification describes:

**“Bridging system 27 maintains a mapping between user priorities and available channels 15 in cell relay network 14.** In preferred embodiments, **for each of bridge ports 26, a map is maintained.** The map may comprise, for example, a lookup table accessible to the system which manages the port 26. The map associates each of the user priorities in whatever system of user priorities is being used with a channel 15 in connection-based network 14 which is accessible by way of one of the service interfaces 30 associated with the port 26. The map may map between user priorities and predetermined connection identifiers for the channels. For example, bridging system 27 may contain data which associates each of bridge ports 26 with a VPI and data which associates each of service interfaces 30 with a VCI, as described above. Equivalently, the map may map between user priorities and service interfaces 30.” *Id.*, 5:40-55 (emphasis added).

Additionally, the specification provides:

**“FIG. 6 illustrates a method 100 according to the invention for forwarding a priority tagged data frame.** A frame is received at block 102. In blocks 104 and 106 **the priority of the frame is determined and the frame is forwarded to a bridge port for delivery** to a destination. Blocks 104 and 106 may occur in either order. In block 108, the frame is assigned to a channel (or equivalently to a service interface associated with an available channel). **Assigning the frame to a channel may comprise looking up the priority determined in block 104 in a map. Then in block 110 the frame is forwarded on the channel.**”

“**he mapping used by bridging system 27 for a bridge port 26 will depend upon the number of channels 15 available to the bridge port 26 (e.g. to a number of the service interfaces 30 which are connected to active channels in network 14).** Since the number of available connections 15 may vary over time, a scheme comprising a plurality of mappings may be provided. As the number of available channels 15 changes, different mappings are selected from the scheme. For example, where, for a particular bridge port 26 there is only a single channel 15 available, the mapping is trivial. All data which passes through that bridge port 26 must travel on the single available channel. As more channels 15 become available, **the**

**correspondence between user priorities and channels 15 can be remapped so that frames having different user-priorities can be sent over different channels 15. The mapping may be stored in a lookup table, the lookup table may be updated each time a channel is added or dropped.”**

*Id.*, 6:15-42 (emphasis added).

Additionally, the specification recites that the invention may be implemented comprising computer processors executing software instructions, or with other components that perform the functions illustrated in the exemplary embodiments, including components which are not structurally equivalent to the structure disclosed in the specification. *Id.*, 8:46-9:7.

Accordingly, the corresponding structure is a bridge with bridging system and bridge port, and equivalents thereof. To the extent an algorithm is required, exemplary algorithms disclosed in the specification are recited at '536 patent, 4:26-37, 5:40-55, 6:4-14, 6:15-42, 7:23-44, 8:21-28, Figs. 1, 2, 4, 5A-I, 6. For example, the specification teaches: “Bridge port 25 may implement a set of service queues which handle the forwarding of packets having different user priorities onto LAN segment 12.” *Id.*, 4:33-35. In a further embodiment, a map of user priorities and available channels, such as a lookup table, is accessible to a bridging system that manages a bridge port. *Id.*, 5:41-55. In another embodiment, the specification teaches a frame is received, the priority of the frame is determined, and then the frame is forwarded to a bridge port for delivery. *Id.*, 6:15-25. As yet another example, the specification teaches that a bridge may permit support for user priorities to be disabled, and in such an instance, all VLAN traffic may be carried over a single channel per port. *Id.*, 7:41-44.

### III. U.S. Patent No. 7,453,888 (Case No. 6:20-cv-00475) Claim Terms

#### 5. “stackable trunk port” (Claims 1, 8, 9, 10, 11, 12, 13, 15, 19, 20)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“trunk port supporting the Riverstone solution

	(i.e. the additional extension 802.1Q packet header)"
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This term should be given its plain and ordinary meaning. Defendants' proposed construction should be rejected at least for improperly importing limitations from the specification. *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1369 (Fed. Cir. 2012) ("Absent disclaimer or lexicography, the plain meaning of the claim controls."). Defendants' proposed construction confusingly and improperly seeks to limit this term to a trunk port supporting "the Riverstone solution" and/or "the additional extension 802.1Q packet header" from exemplary embodiments in the specification. The claims and specification do not require the specific elements of Defendants' construction. Instead, the specification describes a proposed change to an IEEE standard, and then the specification discloses that developments in the field included at the time a proposal to use an additional extension 802.1Q packet header ('888 patent, 5:49-55), and the specification teaches that "[t]he use of the additional packet header provides for a hierarchical grouping of VLANs referred to as VLAN stacking.". '888 patent, 5:55-57. Thus, a stackable trunk port need only support the use of an additional VLAN header. *See also, Id.*, Fig. 2. Defendants' proposed construction should be rejected.

#### **6. "backbone VLAN trunk" (Claims 1, 5, 6, 7, 12, 15, 16, 17, 18, 19, 20)**

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	"data transport trunk links defined between stackable trunk ports on core routers"

This term should be given its plain and ordinary meaning. Defendants' proposed construction should be rejected at least for improperly importing limitations from the specification. *Toshiba*, 681 F.3d 1369 ("Absent disclaimer or lexicography, the plain meaning of the claim controls."). Defendants' proposed construction improperly seeks to limit this term to require "data

transport trunk links defined between stackable trunk ports on core routers.” There is no requirement in the claims or specification that this term carries requirements such as stackable trunk ports or core routers. It appears Defendants are attempting to improperly import limitations from an **exemplary embodiment** in the specification. *See e.g.*, ’888 patent, 8:61-9:35 (“In accordance with an *exemplary embodiment...*”) (emphasis added). Neither the specification nor the claims impose any such limitations upon this term. Instead, the specification describes another exemplary embodiment describing that a backbone VLAN trunk bridges two domains:

“Inevitably edge managed data network elements at the edge of a managed data transport network 100 are used to provide connectivity with adjacent data transport networks managed by peer service providers. Therefore backbone VLAN trunks 308 bridging two managed domains exist.” *Id.*, 11:49-51.

Moreover, Defendants’ proposed construction should be rejected for being confusing and expressly rejected by the specification, at least as to “core routers”:

**“The definition of a core router is somewhat blurred** as the data transport industry is undergoing a “box consolidation” trend wherein even the routers can be logical entities (such as virtual routers). The concepts will be described herein making reference to distinct access routers (106) and core routers (306) **without limiting the invention thereto.**” *Id.*, 8:52-57 (emphasis added).

In other words, the specification expressly warns that the phrase “core routers” is vague and unreliable (“somewhat blurred”), and the specification expressly discloses that the phrase is not intended to be limiting on the invention in any way. Accordingly, for at least the reasons above, Defendants’ proposed construction should be rejected.

7.     **“wherein the selection and association of at least one backbone VLAN ID with each one of the corresponding plurality of backbone VLAN trunks is undertaken irrespective of one of an in-use and a stand-by designation of each one of the plurality of backbone VLAN trunks and each one of the plurality of stackable trunk ports” (Claim 1) / “wherein the association of the plurality of backbone VLAN IDs with the backbone VLAN trunk is undertaken irrespective of one of an in-use and a stand-by designation of the backbone VLAN trunk and the**

**at least one stackable trunk port” (Claim 15)**

<b>WSOU’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“wherein the provisioning method ignores the designation of a backbone VLAN trunk as in-use or stand-by when associating the backbone VLAN ID with the backbone VLAN trunks (as opposed to, during association of VLANs with trunks, explicitly designating physical VLANs associated with a logical VLAN as in-use and explicitly designating other physical VLANs associated with the logical VLAN as back-up)”

These terms should be given their plain and ordinary meaning. Defendants’ proposed construction is vague and unclear. That Defendants’ proposed construction requires a parenthetical alone shows that Defendants’ proposed construction should be rejected as being vague and confusing. Furthermore, Defendants’ proposed construction is also vague and confusing as to its use of the word “ignores” in “ignores the designation.” It is at least unclear whether Defendants are intending an affirmative act be taken in order to “ignore.” This is especially the case given Defendants’ parenthetical that seeks to differentiate “ignores the designation” with “explicitly designating,” which appears to have an affirmative act component of “designating,” which does not appear in the claim language.

The plain language of the claims avoids any such confusion (and the need for a parenthetical) by simply stating that the association is undertaken “irrespective of one of an in-use and stand-by designation.” Moreover, the specification distinguishes the practice of the prior art by disclosing that “[p]rior art VLAN provisioning methods typically call only for trunk ports 102 and routers 106 associated with in-use data transport trunks 108 to be included in VLAN provisioning.” ’888 patent, 3:64-67. As opposed to the plain language of the claims themselves, Defendants’ proposed construction is unnecessary and confusing and should be rejected.

#### IV. U.S. Patent No. 7,565,435 (Case No. 6:20-cv-00476) Claim Terms

8. “setting the IPPC of one of the ports of one of said bridges within the MSTI to a lower IPPC when said port is part of the VLAN member set” (Claims 1, 8, 13)

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	order of steps  The setting of the IPPC to a lower IPPC must occur after the creation and configuration of the Multiple Spanning Tree Instances step and after the creation of the VLAN member sets step

Defendants seek to limit the order of this term that occurs in Claims 1, 8, and 13 of the ’435 patent. Claim 1 is a method claim and Claims 8 and 13 are system and apparatus claims. WSOU contends that the language of the claims should be given its plain and ordinary meaning and that any antecedent basis recited by the claim language will govern any required order of any of the steps. “Unless the steps of a method actually recite an order, the steps are not ordinarily construed to require one. However, such a result can ensue when the method steps implicitly require that they be performed in the order written.” *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342-43 (Fed.Cir.2001).

Additionally, while Claim 1 is a method claim, Claims 8 and 13 are system and apparatus claims, which do not require performance of steps. *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1468, 15 USPQ2d 1525 (Fed. Cir. 1990) (“apparatus claims cover what a device *is*, not what a device *does*.”) (emphasis in original). Thus, for at least Claims 8 and 13, Defendants’ proposal for the order of steps makes no sense. Regardless, even only considering this term as to Claim 1, Defendants’ proposal to limit the claim to a specific order of steps is unwarranted because, at the very least, there is no requirement in the claim language that the so-called “creation and configuration of the Multiple Spanning Tree Instances step” and the “creation of the VLAN

member sets step” must be *completed* before the performance of the term at issue (so-called “setting the IPPC to a lower IPPC”) begins.I In other words, nothing prevents the steps from being performed concurrently. *See Cybersettle, Inc. v. National Arbitration Forum, Inc.*, 243 Fed. Appx. 603 (Fed. Cir. 2007) (nonprecedential) (“We agree with NAF that the comparison and testing steps logically cannot begin until an offer and a demand are received. But that does not mean that the ‘receiving’ steps must be completed before the comparison and testing steps begin. To the contrary, the step of calculating the differences between demands and offers can occur concurrently with the receipt of multiple demands and offers. As each new pair of bids is received, the bids are compared.”)

The two “steps” that Defendant contend must be performed first do not have to be completed before the term at issue is performed. The two “steps” Defendant identify in Claim 1 recite:

“creating and configuring **a plurality** of Multiple Spanning Tree Instances (MSTIs) whose active topology covers the topology of Virtual Local Area Networks (VLANs) being used within the computer network;

creating VLAN member sets and associating each of said VLANs with an appropriate **one of the** MSTIs, each of said VLAN member sets indicating the ports in each of the bridges within **one of the** MSTIs to which data traffic destined to members of the associated VLAN is being forwarded;” ’435 patent, 9:61-10:3 (emphasis added).

As shown by the language of Claim 1, there is nothing in the claim language that prevents the term at issue from being performed before *all* of the “plurality” of Multiple Spanning Tree Instances are created and configured and before *all* the VLAN member sets are created. Defendant’s proposal to limit the claims should be rejected.

**9. “ideally” (Claims 7, 11, 18)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	Indefinite

This term should be given its plain and ordinary meaning. “Ideally” is not a term of degree, and it is not subjective. In fact, it is just the opposite. As the claim language itself shows, “high IPPC is a value that is ideally between the highest value allowed by an encoding and the highest IEEE standard recommended value, regardless of the type of links that are connected to the corresponding ports that are not part of the VLAN member set.” *See ’435 patent, 10:45-49 (Claim 7), 11:32-36 (Claim 11), 12:45-49 (Claim 18).* The term “ideally” as used in the claims is providing an objective indication for what the high IPPC value should be set to.

**10. “processing unit for setting the Internal Port Path Cost (IPPC) of one of the ports of one of said bridges within the MSTI to a high IPPC when said port is not part of the VLAN member set” (Claim 8)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface</p> <p>Structure: Indefinite</p>

This term should be given its plain and ordinary meaning. Because this term does not contain the words “means for,” there is a rebuttable presumption that section 112, paragraph 6, does not apply to that limitation. *Williamson, 792 F.3d at 1348.* That presumption can be overcome, but only “if the challenger demonstrates that the claim term fails to ‘recite sufficiently definite

structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* at 1349. The question whether the term "processing unit" invokes section 112, paragraph 6, depends on whether persons skilled in the art would understand the claim language to refer to structure, assessed in light of the presumption that flows from the drafter's choice not to employ the word "means." *Prisua Eng'g Corp.*, 948 F.3d at 1354. "To determine whether the claim limitation at issue connotes sufficiently definite structure to a person of ordinary skill in the art, [courts] look first to intrinsic evidence, and then, if necessary, to the extrinsic evidence." *Tek Global*, 920 F.3d at 785; *see also Skky*, 859 F. 3d at 1019 ('To determine whether a claim recites sufficient structure, "it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function.'").

Here, a person of skill in the art would understand the claim language to refer to structure, where the specification provides certain exemplary embodiments that recite "**the processing units 108 in bridges A, B, C and D** are used to set the IPPC of any port P1, P2 and P3 of any bridge A, B, C and D within one MSTI to a HiIPPC value if that port is not part of the VLAN member set." '435 patent, 7:57-61 (emphasis added). Moreover, the specification also states that "it can be readily appreciated by those skilled in the art that the present invention provides a method for fully- or semi-automatically configuring IPPCs of ports in the bridges of a computer network and in fully- or semi-automatically creating as many new MSTIs as necessary to ensure proper VLAN connectivity." *Id.*, 8:4-9. Accordingly, as the specification shows, the "processing unit" in this term is a processor within a bridge device. *See e.g., Prisua Eng'g Corp.*, 948 F.3d at 1354 (holding that a 'digital processing unit' is not subject to § 112, ¶ 6, because the term 'clearly serves as a

stand-in for a ‘general purpose computer’ or a ‘central processing unit,’ each of which would be understood as a reference to structure).

**11. “processing unit for setting the IPPC of one of the ports of one of said bridges within the MSTI to a lower IPPC when said port is part of the VLAN member set” (Claim 8)**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	<p>This term is subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: read a priority of a data frame to be forwarded onto the connection-based network by way of the first one of the ports, identify a service interface which the map indicates corresponds to the read user priority and forward the data frame over the channel in the connection-based network associated with the identified service interface</p> <p>Structure: Indefinite</p>

This term should be given its plain and ordinary meaning. Because this term does not contain the words “means for,” there is a rebuttable presumption that section 112, paragraph 6, does not apply to that limitation. *Williamson*, 792 F.3d at 1348. The presumption here is not overcome for similar reasons as discussed for the similar “processing unit” term immediately above. More specifically, here, a person of skill in the art would understand the claim language to refer to structure, where the specification provides certain exemplary embodiments that recite “the **processing units 108 in bridges A, B, C and D** are used to set the IPPC of any port P1, P2 and P3 of any bridge A, B, C and D within one MSTI to a LoIPPC value if that port is part of the VLAN member set.” ’435 patent, 7:63-67 (emphasis added). Moreover, the specification also states that “it can be readily appreciated by those skilled in the art that the present invention provides a method for fully- or semi-automatically configuring IPPCs of ports in the bridges of a computer network and in fully- or semi-automatically creating as many new MSTIs as necessary to ensure

proper VLAN connectivity.” *Id.*, 8:4-9. Accordingly, as the specification shows, the “processing unit” in this term is a processor within a bridge device. *See e.g., Prisua Eng’g Corp.*, 948 F.3d at 1354 (holding that a ‘digital processing unit’ is not subject to § 112, ¶ 6, because the term ‘clearly serves as a stand-in for a ‘general purpose computer’ or a ‘central processing unit,’ each of which would be understood as a reference to structure).

## 12.     **Entirety of claims [9-11, 13-18]**

WSOU’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	Indefinite

Defendants contend that the *entirety* of claims 9-11 and 13-18 are indefinite, and Defendants further purport that treatment of this issue constitutes one claim “term” for purposes of *Markman*. WSOU disagrees that Defendants can group together the *entirety* of each of the **nine** claims as a single issue. *See Schumer v. Laboratory Computer Systems*, 308 F.3d 1304, 1316 (Fed. Cir. 2002) (“When determining the validity of the claims of a patent, each claim must be separately considered”). Regardless, Defendants have represented that their argument is based in *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377 (Fed. Cir. 2005). While WSOU objects to any attempt to treat each of the nine claims identified by Defendants as a single issue, WSOU has reviewed each of the nine individual claims separately and disputes that there is any issue under *IPXL*. *See e.g., MasterMine Software, Inc. v. Microsoft Corporation*, 874 F.3d 1307, 1313-16 (Fed. Cir. 2017) (reversing the district court’s indefiniteness determination and distinguishing from *IPXL Holdings* and *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303 (Fed. Cir. 2011), holding that “the claims at issue here merely claim that the system ‘possess[es] the recited structure [which is] capable of performing the recited functions.’”); *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 827-28 (Fed. Cir. 2016) (Holding that the claims were unlike those in *IPXL Holdings* and *Katz* because they “make clear that the ‘generating

data' limitation reflects the capability of that structure rather than the activities of the user," and "do not reflect an attempt to claim both an apparatus and a method, but instead claim an apparatus with particular capabilities.").

## V. U.S. Patent No. 8,402,129 (Case No. 6:20-cv-00479) Claim Terms

### A. "rate of change" (claim 3)

WSOU's Proposed Construction	Defendant's Proposed Construction
Plain and ordinary meaning	Plain and ordinary meaning; not an instantaneous value measured at a fixed point in time

Dell's construction suffers from multiple flaws.

*First*, the plain and ordinary meaning should apply as neither of the *Thorner* exceptions—lexicography or disavowal—apply. Dell concedes that a plain and ordinary meaning should apply but then goes onto posit a false definition of “rate of change” that does not comport with the understanding of a POSITA. In particular, any given variable can change over time, and the “rate of change” (or first derivative using calculus terminology) is merely the change of that variable over time. For instance, distance is a variable and velocity is the “rate of change” of distance per unit of time. A POSITA would understand that “rate of change” would include both what Dell calls “instantaneous value[s] at a fixed point in time” and continuous values for different time periods. For instance, “rate of change” would encompass how a car might be traveling at 60 miles per hour at a fixed point of time and the various speeds a car travels over a time duration. This comports with the specification’s description of “*at each time t*, a determination is made as to whether the *rate of change* of the monitored *variable* at any node exceeds a fixed amount  $\delta$ . ” ’129 patent at 6:16-18; *accord id.* at 6:37-39 (“It is seen from the foregoing that the strategy of the processes of FIGS. 4 and 5 is to monitor the *rate of change of the monitored variable*  $x_1(t)$ . ”)

Dell's carve-out of "not an instantaneous value measured at a fixed point in time" would exclude the preferred embodiment's description of "rate of change" and is thus improper.

**Second**, Dell relies on flawed legal theory to argue that the prosecution history should limit the plain and ordinary meaning. In its motions to dismiss, Dell has twice argued that "the applicant *made clear* that the 'rate of change' is how much a parameter changes over time, not just the value of the parameter at a single point in time." -479 Case, Dkt. 31 at 3; -479 Case, Dkt. 36 at 3. But the test for disavowal is not merely what the applicant "made clear"; rather, "[t]o disavow the *full scope of a claim term*, the patentee's statements in the specification or prosecution history must represent 'a *clear disavowal of claim scope*.'" *CloudofChange*, 2020 WL 4004810, at \*2 (quoting *Thorner*, 669 F.3d at 1366). In other words, even if the applicants had "made clear," as Dell contends (WSOU disputes this assertion), it would not be enough, because there must be a "clear disavowal of claim scope. *See id.*

**Third**, even if Dell had applied the proper disavowal legal standard, Dell also misrepresents the record by citing only to snippets of the prosecution history and ignoring the statements in their context. Dell first relies on the underlined statement in the prosecution history; WSOU has provided the surrounding comments for full context:

Mandal does not teach a rate of change. Rather, Mandal teaches a policy in which a value of the percentage of bandwidth used for video, *measured at a specific time*, is compared against the 30% threshold. For example, *at time t<sub>1</sub>*, the percentage of bandwidth which is used for video is 28%, which is less than the threshold of 30%. This simply does not teach or suggest a *rate at* which the percentage of bandwidth used for video *changes*. For example, a value of 28% *at a specific point in time* does not teach or suggest that the percentage of bandwidth used for video has *changed at a rate of*, for example, *3% per hour*. In other words, as taught in Mandal, the value is an instantaneous value, measured at a fixed point in time, that is compared against the threshold value. An instantaneous value measured at a fixed point in time, as taught in

Mandal, *is simply not a rate of change*, as claimed in Applicants' claim 1.

-479 Case, Dkt. 31 at 3 quoting -479 Case, Dkt. 31-2 at 28); *accord* -479 Case, Dkt. 36 at 3 (quoting -479 Case, Dkt. 36-2 at 28).

Here, the Applicants merely stated that the variable being monitored in Mandal is not a "rate of change," but merely a value of the percentage of traffic used for video at point in time  $t_1$  (28% in the example). They contrasted Mandal's disclosure with a theoretical disclosure that would disclose the rate of change of percentage of bandwidth used for video (3% *per hour* in the example). The reference to "instantaneous value measured at a fixed point in time" merely is to show that no variable is disclosed as changing per unit of time (as indicated in "per hour" in the example).

A second portion of the prosecution history is even less supportive of Dell's position. Dell cites to the underlined portion of the below:

The cited portions of Boukobza, however, fail to teach or suggest any parameter indicative of a rate of change of usage of a resource or monitoring a rate of change of usage of a resource. Rather, the cited portions of Boukobza merely describe generic parameters that may be measured or tested relative to predefined thresholds. The cited portions of Boukobza do not teach or suggest monitoring a rate of change of usage of a resource.

*See, e.g.*, -479 Case, Dkt. 31 at 3 (quoting -479 Case, Dkt. 31-2 at 9).

Similar to first portion of the prosecution history discussed above, the Applicants were explaining that the cited reference (in this case Boukobza) merely describes parameters that were measured against a threshold. The reference to "generic" is meant to indicate that parameters were generally disclosed, but there was no reference to these parameters being "rate of change of usage of a resource." Both references (Mandal and Boukobza) did not disclose any "rate of change," and that was the only point the Applicants were making. Accordingly, the Applicants did not in any

way suggest of limiting claim scope and certainly did not constitute the requisite “clear disavowal of claim scope.”

- B. “initiating a poll of resources in the nodes of the network by the management station in response to reporting from the node or a time interval being exceeded” (claim 3)**

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	Both of these events trigger a poll

Dell’s construction suffers numerous flaws.

**First**, neither of the *Thorner* exceptions—lexicography or disavowal—apply, so plain meaning should stand. 669 F.3d at 1365. The plain and ordinary meaning of the claim language requires “initiating a poll … by the management station in response to reporting from the node or a time interval being exceeded.” The syntax of the claim requires that the management station must be capable of initiating a poll in response to both “reporting from the node” and “a time interval being exceeded.” But the management station only “[initiat]es a poll” when one of the two events are met—"reporting from the node *or* a time interval being exceeded." This comports with the specification’s description that “[t]he centralized node is arranged to poll all (or a designated number of) nodes if either the rate of change exceeds a threshold, or a time interval is exceeded.” ’129 patent at 6:39-41.

**Second**, Dell’s construction will also confuse the jury. For instance, the claim language recites “*initiating* a poll,” and Dell attempts to substitute that language with “*trigger* a poll.” There is nothing unclear about the word “initiating.” *See Pisoni v. Commando Construction, Inc.*, No. W-17-CV-00055-ADA, 2019 WL 928406, at \*6 (W.D. Tex. Jan. 23, 2019) (“the Court finds such a substitution unnecessary because the words chosen by the scrivener … are more than adequate to be understood by one who is skilled in the art.”). Dell’s construction is also ambiguous to the extent it would require “[b]oth of these events.” The jury will be confused by what is meant by

“events,” and there is no reason to deviate from the language of the claims. Moreover, it is unclear whether Dell means that both events can individually initiate a poll (which is consistent with the plain and ordinary meaning) or that both events are required in tandem to initiate a poll (which is contrary to the plain and ordinary meaning).

**Third**, Dell’s construction erases limitations in the term, including the fact that the “initiating a poll … by ***the management station*** in response to …” Dell’s construction is completely oblivious to the requirement that “initiating the poll” be “by the management station.”

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

A true and correct copy of the foregoing instrument was served or delivered electronically via the U.S. District Court [LIVE]- Document Filing System to all counsel of record on February 17, 2021.

/s/ James L. Etheridge  
James L. Etheridge